

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 26 (canceled).

Claim 27 (new): A method for removing volatile compounds from air, which method comprises passing the air over an adsorber comprising a porous carbon monolith to adsorb the volatile compounds, and then passing an electric current through the adsorber to heat the adsorber and drive off at least some of the adsorbed compounds.

Claim 28 (new): A method as claimed in claim 27 wherein the porous carbon monolith has a resistivity of between 0.1 and 50 ohms/m.

Claim 29 (new): A method as claimed in claim 27 wherein the porous carbon monolith has a cell structure wherein the channel size is between 0.5 and 1mm and the wall thickness is between 0.5 and 1mm and having an open area of between 30 and 60%.

Claim 30 (new): A method as claimed in claim 27 wherein the porous carbon monolith has a surface area of at least 700m²/g.

Claim 31 (new): A method as claimed in claim 27 wherein an adsorber bed comprises a plurality of monoliths electrically connected together in series and/or in parallel.

Claim 32 (new): A method as claimed in claim 31 wherein the gas flow through the monoliths is in series.

Claim 33 (new): A method as claimed in claim 27 wherein the porous carbon monolith is formed of a plurality of shorter lengths of monolith separated by spaces.

Claim 34 (new): A method as claimed in claim 33 wherein the ends of the shorter lengths of monoliths are connected with a metal connector and the ends of the monoliths which are connected are surrounded with a gas impervious to plastic which forms a conduit between the ends of the monoliths..

Claim 35 (new): A method as claimed in claim 34 wherein the monolith end connection is directly soldered to the metal connector.

Claim 36 (new): A method as claimed in claim 34 wherein the monolith end connection is directly soldered to the metal connector and the ends of the carbon monoliths are copper plated.

Claim 37 (new): A method as claimed in claim 27 wherein the exit gases from the porous carbon monolith pass through a granular carbon bed.

Claim 38 (new): A method as claimed in claim 33 wherein the exit gases from the porous carbon monolith pass through a granular carbon bed.

Claim 39 (new): A method as claimed in claim 37 wherein the granular bed comprises one of granular or extruded activated carbon of particle size of 0.1mm to 2mm and has a volume of up to 15% of the volume of the porous carbon monolith .

Claim 40 (new): A method as claimed in claim 27 comprising a plurality of adsorbers and further comprising the steps of, when at least one adsorber has a gas stream containing VOCs passing over it, heating at least one other adsorber by having an electric current passed through it, and when the exit gases from the adsorbing bed reaches a predetermined limit, switching the beds .

Claim 41 (new): Apparatus for the regenerable adsorption of VOCs, the apparatus which comprises an adsorber bed which comprises a porous carbon monolith; a gas inlet and a gas outlet for the adsorber bed, whereby gas or vapour can be passed over the adsorber bed, and means for passing an electric current through the adsorber bed.

Claim 42 (new): Apparatus as claimed in claim 41 wherein the monolithic porous carbon has a resistivity of between 0.1 and 50 ohms/m.